

<b>Year 9 Scientific Reactions</b> <b>Topic: Acid Denaturation and macros</b> <b>SUM1</b>		<b>Duration: 6 lessons</b>	<b>Composite: topic and test</b>
<b>Key vocabulary:</b>	<b>Core knowledge Components</b>	<b>Powerful knowledge components crucial to commit to long term memory</b>	<b>Links to previous and future topics</b>
Marinade Acid Denature Protein Ceviche Soften Citric acid Texture Flavour Milk curds	<ul style="list-style-type: none"> <li>• Why do we need or like to marinate meat (meat, chicken or fish)?</li> <li>• What happens to protein when it is marinated (acid is added and ...)?</li> <li>• What changes occur to the texture of the protein (meat)?</li> <li>• How is yogurt made and what happened to the protein during this process?</li> <li>• Why do we cook food?</li> <li>• How is food cooked (methods of heat transfer; convection, conduction and radiation)?</li> <li>• What does it mean when we say, cooking using 'combination methods'?</li> <li>• What happen to nutrients when heat is applied? (fat, carbohydrates and protein)</li> <li>• How do we use proteins, fats and carbohydrates in cookery? And how do they perform (what do they do in certain recipes/how do they behave)?</li> </ul>	<ul style="list-style-type: none"> <li>• Why do we marinate protein food such as meat, chicken and fish?</li> <li>• What does it mean to ceviche?</li> <li>• What changes occur to proteins when an acid it applied/added?</li> <li>• The functions of fats, carbohydrates and proteins in recipes (their functional properties)</li> <li>• Recognise and define methods of Heat Transfer ; conduction, convection, radiation and combination methods.</li> </ul>	<p><b>Year 7 and 8</b> practical's where carbohydrates, fats and proteins and heat is relevant (all practical's)</p> <p><b>Year 9</b> ; all practical sessions where heat is applied, and where macronutrients are discussed (fats, carbohydrates and proteins)</p> <p><b>Year 10 and 11 NEA 1</b></p>

<b>Year 9 Scientific reactions</b> <b>Topic: NEA1 Trial scientific experiment</b> <b>SUM2</b>		<b>Duration: 6 lessons</b>	<b>Composite: topic and test</b>
<b>Key vocabulary:</b>	<b>Core knowledge Components</b>	<b>Powerful knowledge components crucial to commit to long term memory</b>	<b>Links to previous and future topics</b>
Non- Examined Assessment Research Predict Hypothesis Conclusion Experiment Analyse Measure Comparison Contrast Evaluate	<p>I can conduct a food scientific investigation and I can show that I can;</p> <ul style="list-style-type: none"> <li>• <b>Interpret and investigate my</b> chosen assessment,</li> <li>• <b>Create a plan of action</b> and propose a hypothesis (or make an educated guess) of what I think the outcome will be,</li> <li>• <b>Carry out your plan of action</b> with trialling, developing and testing,</li> <li>• <b>Analyse</b> the data and results and draw conclusions,</li> <li>• <b>Explain</b> whether my prediction was proven.</li> </ul>	<ul style="list-style-type: none"> <li>• Look at what the ingredient is: write a paragraph explaining what it is made from, what it is used for and any other relevant information.</li> <li>• Look at all the different types you can buy (if relevant).</li> <li>• Investigate what the properties of the ingredient/different types of the ingredient are and what they are used for. Write up what you find.</li> <li>• Include some scientific descriptions and use the correct terminology to describe what happens when the ingredient is used.</li> </ul>	Year 9 AT1 &2, SPR1 &2, SUM1 – as pupils get to choose a brief that links to previous scientific investigations.